

CLAIMS

1. An electric circuit for use as a radio receiver or as part of a radio receiver, the electric circuit comprising:
- 5 amplification means for receiving an input signal;
- frequency mixer means for receiving an output of the amplification means, the mixer means being configurable to down-convert a wanted component of the amplified input signal to one of at least two intermediate frequency bands;
- filter means for receiving an output of the frequency mixer means, the filter
- 10 means being switchable between at least two filter configurations;
- and
- control means coupled to the frequency mixer means and to the filter means for selecting an intermediate frequency band and filter configuration appropriate to the input signal.
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2. An electric circuit according to claim 1, the frequency mixer means comprising a plurality of mixers being switchable into and out of use in order to allow configuration of the frequency mixer means, at least one of the mixers being reused for different configurations of the frequency mixer means.
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3. An electric circuit according to claim 2, the frequency mixer comprising four mixers configurable to provide at least two of:
- a quadrature mixer for zero-IF use; and
- a fully complex mixer for low-IF use; and
- 25 a single real mixer for superheterodyne use.
4. An electric circuit according to any one of the preceding claims, wherein the filter means comprises a set of interconnected circuit elements, and switches which modify the interconnections between the circuit elements.
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5. An electric circuit according to any one of claims 1 to 3, wherein the filter means comprises a set of interconnected circuit elements, and means for providing

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23. An electric circuit according to claim 22, wherein the detection means can be switched between at least a real value and a complex modulus operating mode.
- 5 24. An electric circuit for use as a radio receiver or as part of a radio receiver, the electric circuit comprising:
- amplification means for receiving an input signal;
 - frequency mixer means for receiving an output of the amplification means, the mixer means comprising a plurality of mixers which can be configured to provide
 - 10 mixer operation in a plurality of modes, at least one of the mixers being reused in different operating modes;
 - filter means for receiving an output of the frequency mixer means, the filter means being switchable between at least two filter configurations; and
 - control means coupled to the frequency mixer means and to the filter means
 - 15 for selecting a frequency mixer means operating mode and filter configuration appropriate to the input signal.
25. An electric circuit according to claim 24, wherein said filter means comprises a plurality of filters which can be switched into and out of use, at least one of the
- 20 filters being reused in different filter configurations.
26. An electric circuit for use as a radio receiver or as part of a radio receiver, the electric circuit comprising:
- amplification means for receiving an input signal;
 - 25 frequency mixer means for receiving an output of the amplification means;
 - filter means for receiving an output of the frequency mixer means; and
 - control means coupled to the frequency mixer means and to the filter means and capable of selecting a frequency mixer means operating mode and filter configuration to provide each of a low-IF, zero-IF, and superheterodyne architecture.